

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method comprising:

activating telemetry circuitry in a programmer for a medical device, wherein the programmer comprises a display and a display lighting source; and
disabling the a display in the programmer during activation of the telemetry circuitry to reduce electrical interference.

Claim 2 (Previously Presented): The method of claim 1, further comprising disabling circuitry associated with the display during the telemetry.

Claim 3 (Previously Presented): The method of claim 1, wherein the display resides on a circuit board with display circuitry to drive the display, and disabling the display includes disabling the display and the display circuitry.

Claim 4 (Original): The method of claim 1, further comprising enabling the display when the telemetry is not activated.

Claim 5 (Previously Presented): The method of claim 1, wherein the medical device is an implantable neurostimulator, and wherein the programmer includes an internal antenna, and the telemetry circuitry transmits signals to the implantable neurostimulator via the internal antenna and processes signals received from the implantable neurostimulator via the internal antenna, the method further comprising enabling the display when the telemetry circuitry is not activated.

Claim 6 (Previously Presented): The method of claim 1, wherein the programmer includes an internal antenna and an external antenna, wherein the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, the method further comprising enabling the display when the telemetry circuitry performs telemetry via the external antenna.

Claim 7 (Previously Presented): The method of claim 1, wherein the programmer includes an internal antenna and an external antenna, wherein the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, the method further comprising disabling the display when the telemetry circuitry performs telemetry via the internal antenna.

Claim 8 (Original): The method of claim 1, wherein the display is a liquid crystal display.

Claim 9 (Previously Presented): The method of claim 7, wherein the programmer includes the internal antenna and the telemetry circuitry on a first circuit board and the display on a second circuit board.

Claim 10 (Original): The method of claim 9, wherein the internal antenna defines an aperture, and the programmer includes a battery bay extending at least partially into the aperture.

Claim 11 (Previously Presented): The method of claim 9, wherein the telemetry circuitry is coupled to the external antenna via a cable, the method including selectively communicating with the medical device via one of the internal antenna and the external antenna.

Claim 12 (Currently Amended): A programmer comprising:
an antenna coupled to a programmer housing;
telemetry circuitry within the housing to perform telemetry with a medical device via the antenna;
a display within the housing to present information;
a display lighting source; and
control circuitry to disable the display in the programmer during the telemetry to reduce electrical interference.

Claim 13 (Original): The programmer of claim 12, wherein the control circuitry disables circuitry associated with the display during the telemetry.

Claim 14 (Previously Presented): The programmer of claim 12, wherein the display resides on a circuit board with display circuitry to drive the display, and the control circuitry disables the display and the display circuitry.

Claim 15 (Original): The programmer of claim 12, wherein the control circuitry enables the display when the telemetry is not activated.

Claim 16 (Previously Presented): The programmer of claim 12, wherein the antenna is an internal antenna and the telemetry circuitry transmits signals to the medical device via the internal antenna and processes signals received from the medical device via the internal antenna, and wherein the control circuitry enables the display when the telemetry is not activated.

Claim 17 (Previously Presented): The programmer of claim 12, wherein the programmer includes an internal antenna and an external antenna, wherein the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, and the control circuitry enables the display when the telemetry circuitry performs telemetry via the external antenna.

Claim 18 (Previously Presented): The programmer of claim 12, wherein the programmer includes an internal antenna and an external antenna, wherein the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, and the control circuitry disables the display when the telemetry circuitry performs telemetry via the internal antenna.

Claim 19 (Original): The programmer of claim 18, wherein the display is a liquid crystal display.

Claim 20 (Previously Presented): The programmer of claim 18, further comprising:

a first circuit board; and
a second circuit board, wherein the internal antenna and the telemetry circuitry reside on the first circuit board and the display resides on the second circuit board.

Claim 21 (Previously Presented): The programmer of claim 20, wherein the telemetry circuitry is coupled to the external antenna via a cable, and the control circuitry selects one of the internal antenna and the external antenna for telemetry with the medical device.

Claim 22 (Previously Presented): The method of claim 1, wherein the medical device is an implanted neurostimulator.

Claim 23 (Previously Presented): The programmer of claim 12, wherein the medical device is an implanted neurostimulator.

Claim 24 (Currently Amended): A method comprising:

activating telemetry circuitry in a programmer for an implantable neurostimulator,
wherein the programmer comprises a display and a display lighting source;
communicating with the neurostimulator via the telemetry circuitry; and
disabling the a display in the programmer during communication via the telemetry circuitry to reduce electrical interference.

Claim 25 (Previously Presented): The method of claim 24, wherein the programmer is a handheld, portable device.

Claim 26 (Previously Presented): The method of claim 24, wherein the programmer includes an internal antenna, and the telemetry circuitry transmits signals to the implantable neurostimulator via the internal antenna and processes signals received from the implantable neurostimulator via the internal antenna, the method further comprising enabling the display when the telemetry circuitry is not activated.

Claim 27 (Previously Presented): The method of claim 24, wherein the programmer includes an internal antenna, an external antenna, and the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, the method further comprising enabling the display when the telemetry circuit performs telemetry via the external antenna and disabling the display when the telemetry circuit performs telemetry via the internal antenna.

Claim 28 (Currently Amended): A programmer for an implantable neurostimulator, the programmer comprising:

- an antenna coupled to a programmer housing;
- telemetry circuitry within the housing to perform telemetry with the neurostimulator via the ~~internal~~ antenna;
- a display within the housing to present information;
- a display lighting source; and
- control circuitry to disable the display in the programmer during the telemetry to reduce electrical interference.

Claim 29 (Previously Presented): The programmer of claim 28, wherein the programmer is a handheld, portable device.

Claim 30 (Previously Presented): The programmer of claim 28, wherein the antenna includes an internal antenna, and the telemetry circuitry transmits signals to the implantable neurostimulator via the internal antenna and processes signals received from the implantable neurostimulator via the internal antenna, the control circuitry enabling the display when the telemetry circuitry is not activated.

Claim 31 (Currently Amended): The ~~method~~ programmer of claim 28, wherein the antenna includes an internal antenna, the programmer further comprising an external antenna, and the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna, the control circuitry enabling the display when the telemetry circuit performs telemetry via the external antenna and disabling the display when the telemetry circuit performs telemetry via the internal antenna.

Claim 32 (Currently Amended): A system comprising:

an implantable neurostimulator; and

a programmer for the neurostimulator, the programmer including an antenna coupled to a programmer housing, telemetry circuitry within the housing to perform telemetry with the neurostimulator via the ~~internal~~ antenna, a display within the housing to present information, a display lighting source within the housing, and control circuitry to disable the display in the programmer during the telemetry to reduce electrical interference.

Claim 33 (New): The method of claim 1, wherein disabling the display includes disabling electronics on substantially an entire circuit board on which the display is mounted.

Claim 34 (New): The programmer of claim 12, wherein the control circuitry disables electronics on substantially an entire circuit board on which the display is mounted.

Claim 35 (New): The method of claim 24, wherein disabling the display includes disabling electronics on substantially an entire circuit board on which the display is mounted.

Claim 36 (New): The programmer of claim 28, wherein the control circuitry disables electronics on substantially an entire circuit board on which the display is mounted.

Claim 37 (New): The system of claim 32, wherein the control circuitry disables electronics on substantially an entire circuit board on which the display is mounted.

Claim 38 (New): A method comprising:

activating telemetry circuitry in a programmer for an implantable medical device, wherein the programmer includes a display, an internal antenna and an external antenna, wherein the telemetry circuitry performs telemetry via one of the internal antenna and the external antenna;

disabling the display when the telemetry circuitry performs telemetry via the internal antenna; and

enabling the display when the telemetry circuitry performs telemetry via the external antenna.

Claim 39 (New): The method of claim 38, wherein the implantable medical device includes an implantable electrical stimulator.

Claim 40 (New): The method of claim 38, wherein disabling the display includes disabling electronics on substantially an entire circuit board on which the display is mounted.

Claim 41 (New): A programmer for an implantable medical device, the programmer comprising:

an internal antenna mounted within the programmer housing;

an external antenna coupled to a programmer housing;

telemetry circuitry within the housing to perform telemetry with an implantable medical device via the internal antenna or the external antenna;

a display within the housing to present information; and

control circuitry that disables the display when the telemetry circuitry performs telemetry via the internal antenna, and enables the display when the telemetry circuitry performs telemetry via the external antenna.

Claim 42 (New): The programmer of claim 41, wherein the telemetry circuitry is configured to perform telemetry with an implantable electrical stimulator.

Claim 43 (New): The programmer of claim 41, wherein the control circuitry disables electronics on substantially an entire circuit board on which the display is mounted.